

ABSTRACT

A SOFC type fuel cell being small in size and large in output while providing good efficiency and being excellent in starting characteristics and load variation characteristics, is presented.

A honeycomb type solid-oxide fuel cell is formed of a honeycomb structural body having square cell in cross section, wherein cells adjacent to wall surfaces constituting a fuel pole cell (a) function as air pole cells (b) and cells adjacent to the corners of wall surfaces of the fuel pole cell and adjacent to wall surfaces constituting air pole cell function as cooling air cells (c), whereby fuel pole cells, air pole cells and cooling air cells are arranged in longitudinal and lateral rows so that cells of the same type appear in every other location.